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WISCONSIN PEST BULLETIN

Timely crop pest news, forecasts, and growing season conditions for Wisconsin

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Division of Agricultural Resource Management | Bureau of Plant Industry
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WEATHER & PESTS

A rainy weather pattern prevailed in Wisconsin throughout the week. After a period of mostly dry conditions, multiple days of showers and isolated thunderstorms brought ½ to 4 inches of rain, with the highest weekly totals (≥ 2 inches) recorded in the western areas. Prairie du Chien in Grant County received 3.7 inches of rain over six consecutive days (June 19-24). Meanwhile, temperatures were cooler than normal for late June, only reaching the upper 60s to mid-70s midweek. Although the wet weather caused delays to lingering alfalfa harvesting, weed management, and other fieldwork, the rain corrected June moisture deficits for Madison and several other locations, and helped maintain generally favorable prospects for summer crops. According to the USDA NASS, 80% of the state's corn acreage and 82% of soybeans were rated in good to excellent condition at the start of the week. Fruit and vegetables have exhibited a burst of growth after the recent showers.

LOOKING AHEAD

TRUE ARMYWORM: Larvae of various sizes are feeding in the perimeter rows of corn, and reports indicate localized problems have developed in a few fields. Increased monitoring for first-generation armyworm larvae is particularly important at this time.

APPLE MAGGOT: Emergence of flies from the soil could begin in advanced locations before the end of the month. This annual event corresponds with the accumulation of 900 degree days (modified base 50°F) when soil moisture is adequate. Apple maggot traps should be placed soon in orchard perimeter trees to capture the first flies.

EUROPEAN CORN BORER: Larvae are primarily in the early instars and will begin entering corn leaf midribs and unemerged tassels next week. The most effective treat-ment window for first-generation corn borers has opened near Beloit, Lone Rock, Madison and Platteville with the accumulation of 800 degree days (modified base 50°F).

POTATO LEAFHOPPER: Nymphs are appearing in alfalfa. Counts of this stage and the adults are currently below the economic threshold of 2 per sweep for alfalfa 12 inches or taller, but populations could increase abruptly with the hot weather predicted for the week ahead. Routine scouting for leafhopper nymphs in alfalfa, fruit and vegetable crops is recommended starting in early July.

LILY LEAF BEETLE: UW Entomologist PJ Liesch has confirmed the detection of this pest in Outagamie County, noting that the recognizable bright red beetles were reported from two separate locations. Outagamie is the

seventeenth Wisconsin county in which the lily leaf beetle has been found since 2014. Earlier this month, LLB was detected for the first time Clark, Milwaukee, Vernon and Waukesha counties.

WESTERN BEAN CUTWORM: The pheromone trap at Arlington in Columbia County captured the first moths of the season June 18-24, signaling the start of the annual adult flight period. Twenty-five percent emergence of the adult population is anticipated by July 21 throughout the southern half of the state. Cornfields reaching the pretassel stage are preferred for oviposition and should be closely inspected in during the first two weeks of July for egg masses and small larvae.

Western bean cutworm moth themothman.blogspot.com

CORN ROOTWORM: Peak or 50% egg hatch has likely occurred in far southern Wisconsin and should occur in the Madison area by June 29. The first beetles usually appear around Independence Day.

ROSE CHAFER: These beetles are common again this season and reports of damage to grapes, raspberries, strawberries, fruit trees and ornamentals are increasing. Chafer feeding is expected to continue for 2-3 more weeks and will subside in most areas by mid-July. Insecticides are usually not needed to control this early-summer defoliator.

SPOTTED WING DROSOPHILA: Fly emergence is underway. Past experience with this invasive pest suggests that populations are likely to surge in July, with larval infestations in raspberries and other fruits becoming prevalent by mid-month. Fruit growers are advised to increase monitoring efforts next week and make preparations for SWD management.

DEGREE DAYS JANUARY 1 - JUNE 24

LOCATION	50°F	2019	NORM	40°F
Dubuque, IA	1010	919	996	1786
Lone Rock	904	836	—	1638
Beloit	959	835	1008	1714
Sullivan	850	743	931	1555
Madison	917	812	956	1646
Juneau	791	692	—	1459
Racine	749	613	—	1440
Waukesha	818	692	—	1508
Milwaukee	766	631	821	1452
Hartford	760	674	—	1419
Appleton	780	632	—	1429
Green Bay	736	603	813	1362
Big Flats	810	677	—	1480
Hancock	749	634	934	1392
Port Edwards	770	640	908	1417
La Crosse	903	768	1054	1626
Eau Claire	907	727	935	1604
Cumberland	688	594	845	1284
Bayfield	593	442	—	1139
Wausau	634	542	830	1221
Medford	631	543	749	1220
Crivitz	691	579	—	1271
Crandon	607	525	655	1154

Method: Modified B50; Modified B40 as of January 1, 2020. NORMALS based on 30-year average daily temps, 1981-2010.

FORAGES & GRAINS

POTATO LEAFHOPPER: Nymphs are appearing in second-crop alfalfa. Counts in 12 to 18-inch fields in Green, Lafayette, Marquette, Monroe, Rock and Walworth counties were below threshold at 0.3-1.3 per sweep. The weekly average was 0.6 per sweep. Crop scouts are reminded that the neon-green nymphs are often found around the collar of the net and move sideways when disturbed. Economic thresholds for this pest are based on combined counts of adults and nymphs and are as follows: 0.5 per sweep for 3- to 7-inch alfalfa, 1.0 per sweep for 8- to 11-inch alfalfa, and 2.0 per sweep for alfalfa 12 inches or taller.

PEA APHID: Average counts of this insect ranged from 1-18 per sweep, with an average of nine per sweep. Pea aphid levels have continued to increase throughout June, contrary to their usual pattern of peaking by early June and then decreasing sharply before the end of the month.

ALFALFA WEEVIL: Larval populations are now less than 0.3 per sweep and pupation is underway in southern and central Wisconsin. The alfalfa weevil season is expected to end by early July without significant damage observed this year. Scouting for weevil larvae and leaf tip feeding can be discontinued once second-crop regrowth is established.

PLANT BUG: Surveys conducted in the southernmost tier of Wisconsin counties yielded averages of less than 1.1 adults and nymphs per sweep, which is very low in comparison to the economic threshold of five per sweep in alfalfa. Four distinct plant bug species—the alfalfa plant bug, four-lined, rapid and tarnished—were found in sweep net collections in the past week.

Four-lined plant bug *Tracy Schilder DATCP*

CORN

WESTERN BEAN CUTWORM: The first moths of the season were captured in the pheromone trap at Arlington between June 18 and 23. The appearance of western bean cutworm adults indicates that the annual flight is beginning in the southern half of the state. Close inspection of corn plants for egg masses and small larvae should start once fields enter the late-whorl and pre-tassel stages. The eggs are deposited on the upper surface of the top 3-4 leaves, often on the flag leaf, and the larvae can be found in developing tassels.

TRUE ARMYWORM: Larvae are active in corn and small grains and a few fields in central Wisconsin have reportedly been treated for armyworm control. Although the caterpillars are relatively common in the edge rows, DATCP surveys found only non-economic damage affecting 1-16% of corn plants in the past week. Treatment is not warranted unless 25% of plants are infested with two or more armyworms (¾ to one-inch or smaller), or 75% of plants contain one larva. The control threshold in small grains is three larvae per square foot. Conditions remain favorable for armyworms after the recent rains, and this week's observations suggest that increased vigilance is in order.

True armyworm larva *Tracy Schilder DATCP*

STALK BORER: Larval infestations remain light in most fields, seldom exceeding 5%. A few outlier sites in Green County had leaf feeding on 13-17% of the plants in the first four edge rows, but significant damage was not expected since the corn was in the V8 stage.

Stalk borer larva *Tracy Schilder DATCP*

EUROPEAN CORN BORER: Early whorl feeding was first noted in V9 corn in Marquette County on June 23. Larvae were in the first and second instars last week and have now begun boring into the midribs of corn leaves. Chem-

ical and biological insecticides targeting first-generation ECB are only effective for about a week after egg hatch, and must be applied soon in fields where small larvae are emerging. The treatment window is expected to close by July 3 near Madison and July 11 near Hancock. Scouting and management decisions should be made in the week ahead.

CORN ROOTWORM: Egg hatch has been underway since mid-June and will peak across much of the state by early to mid-July. Corn root pruning assessments can begin about a week after the peak (50% egg hatch) has occurred. Continuous corn and areas with Bt performance issues should be the highest priority for inspection and root ratings.

SOYBEANS

SOYBEAN APHID: Early colonies have been found in soybeans in Columbia, Grant, La Crosse, Lafayette, Marquette, Richland and Rock counties since June 8. Counts remain extremely low in most fields. Of the 25 sites surveyed from June 18-24, one had a count of 156 aphids per 100 plants, five had averages below 50 aphids per 100 plants, and 76% of the fields had no detectable aphid population. Routine monitoring for aphids should begin by mid-July.

ROSE CHAFER: This insect is prevalent this season, and light damage is apparent in soybean fields on sandy soils in the southern and western Wisconsin. Defoliation levels have not exceeded the 30% threshold for prebloom soybeans in any field checked by DATCP as of June 24.

Rose chafer beetles on soybean leaf *Tracy Schilder DATCP*

SAND CHAFER: Low populations were encountered in soybeans and corn near Oxford in Marquette County in the past week. The adult beetles, notable for their similarity to Japanese beetles, ordinarily do not cause economic damage to crops. Only light leaf feeding was observed at the sites with sand chafer beetles.

Sand chafer *Krista Hamilton DATCP*

SOYBEAN DEFOLIATORS: A variety of minor defoliators can be found at very low levels in most soybean fields. Included in this category are bean leaf beetles, chafers, green fruitworm larvae, grasshopper nymphs, oblique-banded leafrollers, silver-spotted skipper larvae, and thistle caterpillars, all of which were noted on fewer than 2% of plants examined in fields surveyed during the last reporting period. Prebloom soybeans with combined defoliation rates of 30% or more may qualify for treatment, but defoliation in the vegetative stages seldom results in yield loss, especially when soil moisture, temperatures and other growing conditions are favorable. The economic threshold is lowered to 20% defoliation once soybeans reach the bloom and post-bloom stages.

FRUITS

SAN JOSE SCALE: Crawlers are emerging from beneath scales in southern and western Wisconsin orchards. Known hotspots, areas of suspected high SJS pressure, can be monitored using black electrical tape on scaffold branches. The tape should be wrapped adhesive side-down, and a thin layer of petroleum jelly applied to the outer side of the tape. Captures of 10-15 crawlers on several taped branches over the course of a few days, or 10 crawlers on one tape, may warrant control. Treatments should be applied once the yellow crawlers are active,

but before their white, waxy coverings (white cap stage) start to form on the leaves and branches. Conventional products for summer control include Esteem (pyriproxyfen) or Movento (spirotetramat). Options for organic growers are summer oil and encouraging biological control.

San Jose scale on apple utahpests.usu.edu/ipm

APPLE MAGGOT: Emergence of flies is expected before the end of the month in southern locations. Apple maggot traps should be placed this weekend (June 27-28) in perimeter trees adjacent to wild hosts to capture the earliest adults. Orchards with a history of AM damage should also set a few traps in early-ripening cultivars in the orchard interior. A density of one trap every 200-300 feet along the perimeter and three traps per 10 acres within the orchard is recommended. The economic threshold for apple maggot control is one fly per unenhanced trap per week or five flies per enhanced trap per week.

Apple maggot fly Thaddeva McCamant Central Lakes College

JAPANESE BEETLE: Adults were observed on ornamentals and in field crops this week, suggesting that Neem oil repellant sprays or neonicotinoids must be applied soon, while populations are low and the beetles are beginning to migrate into orchards. Early signs of visible feeding damage warrant application of a repellent like neem oil or a full rate application of a neonicotinoid such as Assail (acetamiprid), Belay (clothianidin), or Alias/Montana/Wrangler (imidacloprid). Neem oil is appropriate for organic systems and effective when applied repeatedly.

PyGanic is another organically acceptable method for immediate contact control, but the material dissipates quickly if applied during the day. A third organic option is Surround WP (kaolin clay) which deters both Japanese beetle and apple maggots, al-though its efficacy against Japanese beetle is inconsistent. If populations are widely dispersed, it is advised to treat the entire orchard rather than spot-treating only the heavily infested blocks. Japanese beetle shows a strong preference for Honeycrisp.

Japanese beetles Tim Allen DATCP

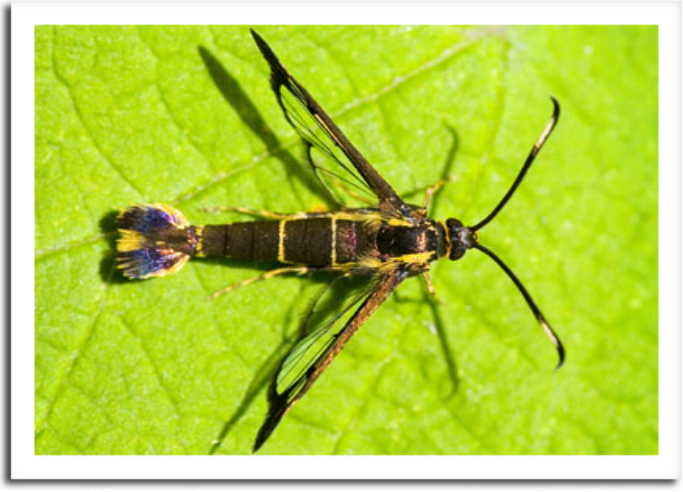
CODLING MOTH: Most orchards have accumulated about 450-600 degree days since the May 24 biofix and first-generation egg hatch has peaked. Locations with a later June 1 biofix are at 350-500 degree days. After last week's general decline in CM flights, several orchards reported another round of higher counts June 18-24, with economic captures of five or more moths per trap per week reported from 9 of 24 cooperating locations (38%).

A second larvacide is often applied at peak egg hatch depending on how large the flight is, and sometimes a third or even a fourth larvicide treatment may be necessary. Apple growers are advised to continue monitoring degree days and CM trap counts until 700 units (modified

base 50°F) have accumulated from the spring biofix to determine if additional late flights require treatment. If any traps exceed the 5 moth per trap per week threshold within the next two weeks, John Aue suggests treating those as a "B" hump or a "mini-biofix" where a larvicide is applied after another 250 degree days have accumulated.

Codling moth entry in calyx *Steve Schoof NCSU*

DOGWOOD BORER: This clearwing moth began appearing in pheromone traps two weeks ago. The traps do not indicate the need for control, but instead signal when to begin scouting for evidence of DWB larval feeding, such as frass around the graft union of trees. DATCP cooperators should be aware that the commercially available DWB pheromone lure attracts several native clearwing moth species, therefore accurate identification is important. The correct height for DWB traps is 3-4 feet above the ground. Scouting for this pest is especially important for orchards with new trees planted in the last five years.



Dogwood borer moth *Jim Gilbert flicker.com*

OBLIQUEBANDED LEAFROLLER: Larval offspring from the first moth flight are emerging across the southern half of the state. The small, newly-hatched caterpillars are controlled by most products applied for codling moth (except granulosis virus and mating disruption), but scouting terminals and younger trees is still required to determine if codling moth sprays have effectively reduced OBLR populations or if additional measures are needed to prevent fruit damage. Sampling for fruit and foliar feeding should begin about a week after the first moths are captured in pheromone traps. John Aue of Threshold IPM Services recommends an application for any OBLR catches over 10 moths per week.

SPOTTED WING DROSOPHILA: Fly emergence began in western Wisconsin by June 21. The first capture of SWD adults in survey traps should be viewed as an early warning to fruit growers to increase monitoring efforts and make preparations for SWD management. This invasive pest is particularly challenging for organic growers due to the limited number of organically approved and effective insecticides. The recently developed guide available at https://www.canr.msu.edu/ipm/uploads/files/SWD/SWDOrganicBerryCrops.PDF provides a list of non-chemical and insecticide approaches to protect berry crops against SWD. Controlling SWD requires a rigorous, persistent and diverse management plan.

Spotted wing drosophila larva in raspberry *wrir4.ucdavis.edu*

SPOTTED TENTIFORM LEAFMINER: Moths of the second flight are emerging in greater numbers, with pheromone trap counts ranging as high as 957 per trap and averageing 122 per trap. This is up markedly from last week's average of 13 per trap. Peak moth activity should occur by mid-July across southern and central Wisconsin and a week or two later in the southeastern, east-central and

northern areas. Apple orchards with populations exceeding one mine per leaf or a history of STLM damage are candidates for control of second-generation larvae.

VEGETABLES

SQUASH VINE BORER: The summer flight has started. The emergence of moths signals that vegetable growers should begin checking vine crops for the flat, brown eggs deposited at the base of stems. Control is required immediately after the eggs are found to prevent the larvae from boring into the vines. Gardeners may remove the eggs by scraping with a fingernail. Covering plants with row covers or netting to prevent egg deposition and placing yellow pheromone-baited sticky traps around plantings may also help to reduce problems. A conventional insecticide or kaolin clay applied to the plant bases as a weekly spray during the three- or four-week egg laying period can provide protection if the sprays thoroughly cover the plant stems and are applied repeatedly to assure good control.

Squash vine borer eggs bemerson westmadison.ars.wisc.edu

POTATO LEAFHOPPER: Nymphs are appearing in vegetable crops and early July heat could cause an abrupt population increase. A threshold of one nymph per 10 leaves or one adult per sweep indicates control is justified for snap beans. The threshold for potatoes is 2.5 nymphs per 25 leaves or 0.5-1.0 adult per sweep.

RED TURNIP BEETLE: This red and black beetle has been observed in central Wisconsin alfalfa. Red turnip beetle is a sporadic pest in the Central Sands area of the state, feeding on plants in the mustard family. Hosts include broccoli, cabbage, kohlrabi, radish and turnip, but hoary alyssum and yellow rocket are thought to be the primary food plants. Small seedlings and transplants are the most susceptible to red turnip beetle feeding, while established plants can tolerate severe defoliation. Removing the adult beetles by hand is the recommended control. Beetle numbers usually decline by early to mid-July.

Red turnip beetle Doug Waylett flickr.com

SQUASH BUG: Adults are appearing on cucurbits in home gardens, and populations generally increase sharply by mid-July with the addition of small nymphs. An average of one egg mass per plant when plants are flowering is recommended as the basis for initiating treatment. For gardens, hand picking and destroying the bugs and their eggs is most effective. Another option is to place cardboard or newspaper on the ground next to the plants. At night the squash bugs will aggregate beneath the cardboard and can be destroyed in the morning.

Squash bug adult female Krista Hamilton DATCP

Organic growers may use directed applications of pyrethrum (PyGanic) or the pre-mix with azadirachtin (Azera).

Growers should be aware that the efficacy of most insecticide materials is reduced at temperatures above 80°F and the smaller nymphs are more easily killed than the adults. Refer to UWEX publication A3422 "Commercial Vegetable Production in Wisconsin" for a list of registered insecticides.

CABBAGE CATERPILLARS: Low to moderate infestations of diamondback moths and imported cabbageworms are prevalent in southern and western Wisconsin community gardens. The larvae of these cabbage pests feed on leaves and cause large ragged holes, eventually infesting the developing heads of broccoli, cabbage and cauliflower. Treatment thresholds are reached when 10% of cabbage in the early heading to mature head stages are infested, or 10% of broccoli and cauliflower in the first flower or curd to maturity phase are damaged.

Diamondback moth larva infonet-biovision.org

Cole crop growers are reminded that imported cabbageworms, diamondback moths and cabbage loopers are considered to be a single caterpillar complex, and the same infestation threshold applies to all three species. *Bacillus thuringiensis* (Bt) and chemical insecticides are effective controls for small caterpillars.

CUTWORMS: Several CSA growers have reported cutworm infestations primarily impacting greenhouse plants this month. Cutworms are active throughout the summer, but are rarely a problem after spring. Problems can be reduced by placing aluminum foil or cardboard collars around transplants to create a barrier that stops cutworm feeding. If damage or larvae are discovered, the cutworms should be physically removed and crushed or dropped into soapy water.

NURSERY & FOREST

ANTHRACNOSE: Nursery inspectors report that red maple trees at nurseries across the state are exhibiting foliage with brown, necrotic spots and premature leaf loss due to this fungal disease. Anthracnose rarely causes permanent damage to trees unless severe symptoms persist for several consecutive years. Pruning branches to open the canopy and promote airflow, as well as raking fallen leaves, may reduce its incidence next season.

XANTHOMONAS: This bacterial leaf spot disease was diagnosed on hydrangeas from a Dane County nursery earlier this month and has since been found in nurseries throughout the state. Xanthomonas is favored by warm, wet conditions and overwinters in infected plant debris, spreading to new growth by rain splash or overhead irrigation. Classic signs of the disease are dark, angular leaf spots that coalesce and may kill mature leaves. Recommended controls include removal and destruction of infected leaves and debris, avoiding pruning during wet periods, and sterilizing tools between cuts. Susceptible hydrangea species include *H. arboreacens*, *H. macrophylla*, and *H. quercifolia*.

Xanthomonas campestris on hydrangea Timothy Allen DATCP

BRONZE BIRCH BORER: Signs of this wood-boring beetle were recently observed on the trunks of 'Parkland Pillar' birch trees in Polk County. Adult bronze birch borers infest trees weakened or stressed due to drought, disease, sun exposure or nutrient deficiency. Larval feeding beneath the bark results in the girdling of branches and stems. Infested trees also develop swellings or bumps on the trunk around the feeding tunnels. Immediate removal and destruction of infested birch is recommended since this

insect kills its host within just a few years. Holding trees in containers more than one year contributes to birch tree stress and increased risk of beetle attack.

Bronze birch borer exit holes *Konnie Jerabek DATCP*

GYPSY MOTH: A population of defoliating gypsy moth caterpillars was identified earlier this week on river birch nursery stock near Washburn in eastern Bayfield County. Gypsy moths are most commonly transported when they are in the egg mass stage, but nursery growers and retailers are reminded that the larval stages are also capable of hitching a ride on plants. Only clean, gypsy moth-free plants should be moved to prevent the spread of this invasive pest to uninfested areas. Bayfield County in northern Wisconsin is on the edge of the gypsy moth's westward advance.

Gypsy moth larva on river birch *Timothy Allen DATCP*

DUSKY BIRCH SAWFLY: Large clusters of second-generation larvae were feeding on the foliage of 'Royal Frost' birch in northwestern Wisconsin. The gregarious caterpillar-like larvae feed around the edges of leaves and curl into a distinctive-"S" shape when disturbed. Heavy defoliation by this insect is rare, and chemical control is seldom required.

BRISTLY ROSE SLUG: The green, bristly larvae of this sawfly were feeding on 'Pink Drift' shrub roses in St. Croix County last week, skeletonizing the leaves. Defoliation may be reduced by removing the larvae and infested leaves. Horticultural oils or residual insecticides are also effective.

Bristly rose slug sawfly *Konnie Jerabek DATCP*

VIBURNUM LEAF BEETLE: Brown County has been added to the growing list of counties with known viburnum leaf beetle populations. This invasive defoliator has now been found in 11 Wisconsin counties since 2009, including Dane, Iron, Kenosha, Milwaukee, Ozaukee, Racine, Walworth, Washington, Waukesha and Winnebago. Nursery inspections in the past week noted VLB injury to *Viburnum dentatum* plants at nurseries in Washington and Waukesha counties. The plants were ordered for removal and destruction. Successive feeding by VLB larvae and adults prevents shrubs from refoliating and can kill healthy plants after 2-3 years of heavy infestation.

SOCIAL PEAR SAWFLY: Parker pear trees at a nursery dealer in Polk County were infested with larval pear sawflies. The orange caterpillar-like larvae feed in groups within webbing on pears, hawthorn and cherries, creating webs similar to the eastern tent caterpillar. Larvae first appear in June, feed on leaves for a month, then pupate. There is one generation per year in Wisconsin. Pear sawfly damage is largely cosmetic and pruning out the affected branches (if larvae are still present) is the suggested control.

APPLE INSECT & BLACK LIGHT TRAP COUNTS JUNE 18 - 24

COUNTY	SITE	STLM[1]	RBLR[2]	CM[3]	OBLR[4]	DWB[5]	LPTB[6]	BMSB[7]	AM RED[8]	YELLOW[9]
Bayfield	Keystone	0	3	5	1	12	4	0		
Bayfield	Orienta	6	0	0	0	37	3	—		
Brown	Oneida	11	0	10	15	6	12	0		
Columbia	Rio	64	7	1	3	—	5	—		
Crawford	Gays Mills	273	7	0 MD	0	—	20	—		
Dane	Mt. Horeb	74	30	1	2	—	6	0		
Dane	McFarland	—	—	—	—	—	—	—		
Dane	Stoughton	125	33	2	3	1	9	0		
Fond du Lac	Campbellsport	8	11	0	1	3	0	0		
Fond du Lac	Malone	36	0	7	2	14	5	0		
Fond du Lac	Rosendale	16	4	0	3	5	1	—		
Green	Brodhead	24	52	3	8	—	2			
Iowa	Mineral Point	130	3	3 MD	0	—	17	0		
Jackson	Hixton	21	0	2	3	0	7	—		
Kenosha	Burlington	170	2	7	4	29	7	0		
Lafayette	Belmont	51	1	1 MD	1	—	4			
Marathon	Edgar	957	0	4	1	—	16	0		
Marinette	Niagara	0	0	0 MD	29	—	4			
Marquette	Montello	41	8	0	10	0	17	0		
Ozaukee	Mequon	0	0	0	0	—	0	0		
Pierce	Beldenville	376	2	16	1	6	0	—		
Pierce	Spring Valley	—	—	—	—	—	—	—		
Racine	Raymond	415	0	25	5	—	25	—		
Racine	Rochester	0	0	5	0	3	1	1		
Richland	Hill Point	—	—	—	—	—	—	—		
Sheboygan	Plymouth	207	0	0 MD	0	—	7	—		
Walworth	East Troy	52	4	0 MD	12	0	0	0		
Walworth	Elkhorn	50	8	0 MD	25	0	0	0		
Waukesha	New Berlin	150	0	12	4	—	11	—		

[1]Spotted tentiform leafminer; [2]Redbanded leafroller; [3]Codling moth; [4]Obliquebanded leafroller; [5]Lesser peachtree borer; [6]Dogwood borer; [7]Brown marmorated stink bug; [8]Apple maggot red ball; *Unbaited; **Baited; [9]Apple maggot yellow board.

COUNTY	SITE	BCW[1]	CEL[2]	CE[3]	DCW[4]	ECB[5]	FORL[6]	SCW[7]	TA[8]	VCW[9]	WBC[10]
Columbia	Arlington	0	0	0	0	3	0	0	11	0	0
Columbia	Pardeeville	0	1	0	0	7	0	26	22	0	0
Dodge	Beaver Dam	2	2	0	0	1	0	10	3	0	0
Fond du Lac	Ripon	0	0	0	0	1	0	4	7	0	0
Grant	Prairie du Chien	0	0	0	0	0	0	0	0	0	0
Langlade	Antigo	0	1	3	0	0	0	0	4	0	0
Manitowoc	Manitowoc	0	0	0	0	0	0	7	13	0	0
Marathon	Wausau	1	0	0	0	0	0	24	4	0	0
Monroe	Sparta	—	—	—	—	—	—	—	—	—	—
Rock	Janesville	0	0	0	0	7	0	0	2	0	0
Walworth	East Troy	1	0	0	0	0	0	0	0	0	0
Waushara	Hancock	0	4	0	2	0	0	0	0	0	0
Wood	Marshfield	0	1	0	0	0	0	22	1	0	0

[1]Black cutworm; [2]Celery looper; [3]Corn earworm; [4]Dingy cutworm; [5]European corn borer; [6]Forage looper; [7]Spotted cutworm; [8]True armyworm; [9]Variegated cutworm; [10]Western bean cutworm.